

REMARKS

These remarks are in response to the Official Action mailed July 27, 2005. No amendments are made. Claims 1-11 and 13-24 are now presented for the Examiner's consideration in view of the following remarks:

The Present Application

The present application is directed to a method and system including a wireless local area network, and, more particularly, to a wireless local area network that permits use by a non-subscriber. The network can be used on a "walk-in" or a "pay as you go" basis.

Exemplary claim 1 of the present application is directed to a method of providing temporary wireless services on a pay-per-use basis over a wireless local area network. The method includes the steps of providing a temporary wireless service connection to a non-subscribing user, determining a usage amount incurred by the user for the temporary wireless service connection; and charging the user for the determined usage amount for the temporary wireless service connection.

As noted in the specification, the non-subscribing user is not required to commit to a wireless service contract; instead, the services are provided on an "as-used" basis (specification, page 4, lines 6-8). Claim 1 requires that the wireless services are temporary; i.e., the services are not set up in a prearranged contract.

Claim 9 is directed to a method for providing a temporary wireless service connection to one or more users in a wireless local area network. In that method, a request is received from a user for temporary wireless service. A temporary wireless service connection is established for

the user. In establishing the connection, a dynamic host configuration mechanism apportions an IP address to the connection for a predetermined time interval, and terminates the connection when the predetermined time interval expires. A usage amount is determined for the temporary wireless service connection for the user. That usage amount is based at least in part on the number of minutes in the predetermined time interval. The user is then charged for the usage amount for the temporary wireless service connection.

The Examiner has rejected claims 1, 3 and 5 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,424,706 to Katz et al. ("Katz"), has rejected claims 2, 6, 9-11, 13, 14 and 16-24 under 35 U.S.C. § 103(a) as unpatentable over Katz in view of U.S. Patent No. 6,526,033 to Wang et al. ("Wang"), and has rejected claims 4, 7, 8 and 15 under 35 U.S.C. § 103(a) as unpatentable over Katz in view of Wang and further in view of the Examiner's Official Notice. Applicants respectfully submit the claims as amended are novel and non-obvious for the reasons stated below, and that all the claims of the present application are in condition for allowance.

Discussion

The Cited Patents Do Not Disclose a Wireless LAN

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (quoting *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Applicants submit that neither Katz nor Wang, the two references depended upon by the Examiner, teaches or discloses a system or method deployed over a wireless local area network (WLAN) or local wireless network, as required by every claim in the present case. The multiple rejections based on Katz and Wang will therefore be addressed collectively in this section.

The present invention is directed to a simple and elegant system for providing temporary wireless services to a user on a pay per use basis in a wireless local area network, i.e. a wireless LAN. See, e.g. Specification, page 2, lines 3-4. In the present invention, users may be charged for the temporary wireless services on a per time basis, a per packet basis, a per byte basis and/or on a per transaction basis within such a wireless LAN. See, e.g. Specification, page 2, lines 13-15. The present Specification makes it very clear that the present invention operates within such a wireless LAN, e.g. "a wireless local area network communication system 10 is illustrated for providing temporary wireless services to one or more users on a pay per use basis." See, e.g. Specification, page 4, lines 3-5; see also, e.g., FIG. 1. Each of the claims expressly requires such a system.

In complete contrast, Katz relates to an entirely different invention, one totally unrelated to wireless LANs. Katz provides a system and method for exchanging stored value accounts such as prepaid "long distance and other telephone card minutes" (Katz, col. 1, lines 8-17). As to wireless systems, Katz specifically describes the use of such minutes as "integrated with a wireless telephone network and a telecommunication switch-based prepaid telecommunication system" (Katz, col. 12, lines 38-41). The prepaid minutes dealt with in Katz are used in a "traditional wireless telephone network" (col. 12, lines 44-45). The Katz disclosure is unrelated to a wireless LAN.

Katz clearly contemplates use of his system with the public wireless and wired telephone networks, as well as other network infrastructure, all of which are wide area network, not wireless LANs:

FIG. 3A is a schematic representation of a preferred embodiment of a unit-minute system 340 in which said system is integrated with public switched telephone network 150, prepaid telecommunication platform 170, wireless telecommunications network 160, an ATM/POS financial network 223, an interbank financial network 365 and Internet 168. Communication between PSTN 150, wireless network 160 and prepaid platform 170 is also illustrated in FIG. 1D and described herein. In a preferred embodiment, unit-minute system 340 is comprised of a computer system 343, a database 344, a telecommunications switch 341 and a notification subsystem 342.

(Katz, col. 14, line 40-51). Overseas transfers of prepaid minutes are contemplated (col. 4, lines 51-56). The Katz system includes specific steps for dealing with transactions that cross currency boundaries (Katz, col. 20, lines 22-27). Clearly, none of those attributes relate to a wireless LAN.

Given the above, the invention in Katz is clearly based on a wide area network and not a wireless LAN. Katz therefore nowhere teaches a wireless local area network.

Similarly, Wang is directed specifically to roaming in a cellular/PCS network:

Method and system integrating wireless/wireline and circuit/packet networks (to bypass GSM [*Global Systems for Mobile Communication*] Memorandum of Understandings) for cellular/PCS services so that GSM subscribers roaming into CDMA networks can be provided with basic call delivery cellular services as long as the roamers can pay the bill with their valid

credit card. This is achieved by integrating wireless and wireline networks as well as circuit and packet networks, using IP networks and protocols as an alternative to the existing telephony-based approach.

Wang, Abstract (*comment added*). Wang is therefore clearly based on the ability and provision of roaming within a cellular network. It is known to those skilled in the art that a wireless LAN does not have "roaming." Nowhere in Wang is there disclosed any wireless local area network as required by the claims in the present case.

Therefore, neither Katz nor Wang, the two references relied on by the Examiner in rejecting the claims of the case, teaches a wireless local area network. The Examiner has pointed to no passage in either reference teaching that limitation. Applicants therefore assert that the independent claims 1, 9 and 17 are neither anticipated by nor obvious over the cited art, and further that the dependent claims are patentable for the same reason.

No Motivation to Combine Katz and Wang

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

The Examiner has offered no teaching in the references that would motivate one skilled in the art to make the combination of Katz and Wang made by the Examiner. Applicants submit that no such motivation exists, and that the rejections based on obviousness over Katz in view of Wang be withdrawn for that additional reason.

The two cited references address completely different problems. Katz is directed to a system and method for conducting transactions in stored value accounts such as telephone minutes or airline miles (Katz, col. 1, lines 8-24). Wang et al. have disclosed a system and method to facilitate GSM subscribers to roam in CDMA networks (Wang, Abstract). The Examiner has provided no teaching that would motivate one to apply an invention in the cellular telephony arts to a business method in the stored value account transactions art.

Applicants therefore submit that the Examiner has incorrectly combined the Katz and Wang references, and that claims 2, 4, 6-11 and 13-24 are patentable for that additional reason.

Katz Does Not Teach Providing a Wireless Service Connection to a Non-Subscribing User

The Examiner has rejected independent claim 1 as anticipated by Katz. Specifically, the Examiner has alleged that Katz, in FIG. 2A, teaches all the elements of claim 1. Applicants respectfully disagree, at least because neither FIG. 2A, nor any other disclosure of Katz, teaches providing a wireless service connection to a non-subscribing user, as required by claim 1.

FIG. 2A of Katz shows a single non-subscribing user 106. In the transfer transaction T¹, the subscriber 100 transfers to a redemption office 202 a quantity of minutes 201 (Katz, col. 13, lines 31-44). The subscriber 100 then receives from the office 202 a code 203, which the subscriber relays to the non-subscriber in a telephone call 204. In redemption transaction R¹, the non-subscriber 106 then redeems the minutes using code 203, and *collects a monetary value 206*.

Nowhere in FIG. 2A is shown a transaction wherein the non-subscriber is provided a temporary wireless service connection, as required by claim 1. Similarly, in FIGS. 2B and 2C, the non-subscriber conducts monetary transactions.

The Abstract of Katz discloses “the subscriber . . . transfer[ing] unit minutes to others (including non-subscribers).” That passage clearly describes the transaction shown in FIG. 2, wherein the non-subscriber actually receives the monetary value of the minutes. It clearly does *not* disclose “providing a temporary wireless service connection to a non-subscribing user,” as required by claim 1.

Applicants therefore assert that Katz does not anticipate independent claim 1 for the additional reason that Katz does not teach providing a temporary wireless service connection to a non-subscribing user. Applicants further assert that dependent claims 3 and 5, by reason of their dependency, are patentable for that additional reason.

Claim 9 is Non-Obvious Because References Do Not Disclose Using a Dynamic Host Configuration Mechanism as Claimed

The Examiner has rejected independent claim 9 as obvious over Katz in view of Wang. Applicants traverse that rejection for the additional reason that Katz and Wang, alone or in combination, do not disclose the use of a dynamic host configuration mechanism as claimed. The method of claim 9 includes the following steps:

- receiving a request for temporary wireless service for a predetermined time interval from a user;
- establishing a temporary wireless service connection for the user, wherein a dynamic host configuration mechanism apportions an IP address to the user for the predetermined time interval, and terminates the connection when the predetermined time interval expires;
- determining a usage amount for the temporary wireless service connection for the user, the usage amount being based at

least in part on the number of minutes in the predetermined time interval; and
charging the user for the usage amount for the temporary wireless service connection.

The embodiment of claim 9 takes advantage of a "DHCP-like" protocol in the wireless local area network, which may be DHCP (dynamic host configuration protocol), to provide an IP address to a user on a "lease" basis; i.e., the IP address has a term that expires at the end of some predetermined time interval (specification, page 6, lines 1-11). The predetermined time period is the amount of time requested by the user. That arrangement provides an efficient way to limit wireless network access to a prepaid amount of time. For example, a user may use cash to prepay a limited session. The user is charged for the lease term of the IP address, and is unable to access the network outside that term.

The inventors have discovered a simple and powerful technique for permitting non-subscribers to use a wireless network. The "DHCP-like" protocol enables the system to limit the time interval during which the user has network access, without adding custom protocol exchanges. The user is then charged for that time.

In contrast, Wang simply discloses the use of DHCP to assign an IP address. Neither Wang nor Katz teaches the use of DHCP to terminate a connection based on a predetermined time interval, and then determine a usage amount and charge based on that interval. For that additional reason, Applicants submit that independent claim 9, and dependent claims 10, 11 and 13-16, are patentable over the cited references.

Claim 7 is Non-Obvious Because No Suggestion to Combine 802.11 Standard

The Examiner has rejected claim 7 as obvious over Katz in view of Wang and further in view of the Examiner's Official Notice of the 802.11 standard wireless LAN protocol.

Applicants traverse that rejection for the additional reason that one skilled in the art would not have been motivated to combine a wireless LAN protocol with the business method transaction system of Katz and the cellular telephone system of Wang. Furthermore, an 802.11 standard protocol wireless network would not function with the cellular telephone systems disclosed in Katz and Wang.

For that additional reason, Applicants submit that claim 7 is patentable over the cited art.

Conclusion


Applicants therefore submit that none of the claims presented in the case are obvious over the cited art, and assert that claims 1-11 and 13-24 are now in condition for allowance.

Applicants earnestly request that the Examiner issue a Notice of Allowance.

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Should the Examiner have any questions regarding the present case, the Examiner should not hesitate to contact the undersigned at the number provided below.

Respectfully,

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